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Protecting the Right to Exist as a People: Intellectual Property as a Means to Protect Traditional Knowledge and Indigenous Culture

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Abstract

The dominant Western culture has created a legal system premised upon an individualistic and commercial foundation for intellectual property rights (IPR). This system necessarily excludes the protection of traditional knowledge and other components of Indigenous cultures, as well as concepts of communal responsibility for the keeping and transfer of such ideas and knowledge. These concepts are foundational to Indigenous knowledge systems in Alaska, as well as throughout the world. Today, a focus on this issue is critical to the preservation of indigenous cultures and their ways of knowing. We examine where national and international intellectual property rights systems are in addressing Indigenous cultural and intellectual property rights (Indigenous CIPR). We also examine opportunities for expansion of such rights in Alaska and around the world.

Intellectual Property Rights and Indigenous Peoples: An Overview

In order to understand the basis of intellectual property rights (IPR) throughout the world, it is important to recognize the way in which laws are established and how this affects Indigenous peoples. Laws reflect the priorities and values of the society that implements them. They are often utilized as political tools to shape society (Sypnowich, 2019). In a democracy, laws are a rough measure of what the majority of a voting electorate may want achieved. As the dominant culture is often reflected through a majority-rule democracy, it largely determines such laws. The creation of intellectual property rights (IPR) law is an example of this phenomenon.

Within the context of majority-rule democracy, the values of minorities—both ethnic and ideological—are often sidelined or suppressed by the majority (Fuentes-Rohwer, 1996; Political Database of the Americas, 1995). This applies especially to Indigenous peoples who are subject to the values and laws of the majority, even on their own ancestral lands (Davis & Wali, 1994; JGCEE, 2016). Indigenous peoples often comprise small percentages of the population in most of the democracies of the world today. Although Alaska enjoys a remaining substantial population of its Indigenous peoples at 14.2 percent of the total population of Alaska (Alaska Population, n.d., p. 10),[1] for much of the post-colonial period, they have been limited in the effectiveness of their participation in the democratic process or they have been historically excluded therefrom. It is not surprising, therefore, that the IPR legal systems in place today that impact Alaska and elsewhere have not historically been designed or applied to address the protection of Indigenous traditional knowledge (TK) or collectivistic ownership of cultural and intellectual property.

This paper presents background for the reasons IPR legal systems today fail to meet this challenge. We outline the inherent incompatibilities between the legal IPR protections offered today and those necessary for the adequate protection of TK. We provide examples of these conflicts particularly in an Alaska Native studies context. Finally, we outline the

[1] Alaska Population. (2019-04-01). Retrieved 2019-04-27, from http://worldpopulationreview.com/states/alaska/

ways in which current IPR law may be used and/or amended, or new laws put into place, to address these issues. Traditional knowledge offers an important path to the future for Indigenous peoples, as well as providing an opportunity to respectfully acknowledge the past. Both provide advantages for the future of mankind, and to the larger societies within which our cultures are now encompassed. This is true within Alaska, the United States, and internationally.

The Dominant Culture's Usurpation of the Cultural and Intellectual Property Rights of Indigenous Peoples

It has been well documented that the current Western culture-based intellectual property rights system does not provide an adequate series of mechanisms to protect the TK and cultural rights of Indigenous peoples.[2] Yet such TK is increasingly being recognized and reclaimed by Indigenous peoples as a critical aspect of their self-determination and a projection of their sovereignty. Traditional knowledge is inherent to defining what constitutes Indigenous people, both internally among themselves and externally. Hence, the lack of legal protection largely afforded to such TK under the current Western system is problematic at best, and a barrier to self-determination, cultural preservation, sovereignty, and self-identity at worst. This challenge is exacerbated in the context of unique smaller demographic indigenous populations in Alaska where the effects of boarding schools and the loss of even a small group of the last traditional language speakers and traditional knowledge bearers due to old age causes critical cultural lifeways to change or become lost (Ilutsik, 1999).

The IPR system that is in place today in economically developed nations does not provide legal protection for most forms of TK. For example, any traditional oral history, songs, stories, or any form of artistic expression in their original forms are considered to be in the "public domain," and is, therefore, is not legally protectable (Duhaime, n.d., p. 1; Grande, 2004, p. 111; Tsosie, 2017, p. 1-2). As a result, the only way that Indigenous peoples can arguably have some legal rights to the works that their ancestors created is if they produce a "derivative work" of such creations, and utilize the IPR system to become independent, registered owners of that work. However, there is an inherent weakness in this approach, as anyone else—including non-Indigenous peoples—also have the right to do this. As anyone, regardless of their ethnic or cultural background, can pick an ancient indigenous petroglyph, pictograph, sculpture, story, song, medicinal formula, ceremony, or symbol, slightly alter its design or composition, and register it as their own, the current IPR system allows Indigenous peoples no exclusive rights to, control over, or protection for,

[2] "While it is clear that an indigenous people can constitute a minority of a country's population not all minorities are necessarily indigenous (such as African-Americans in the United States). Despite a certain level of consensus there is still no settled definition of what constitutes an indigenous people. The purpose of seeking the status of an indigenous group is usually to assert collective, rather than individual, rights. Some definitions focus on attachment to land and vulnerability, while others look to historical descent from the earliest population" (Paterson, 2001, p. 1).

their ancestors' works, or to derivatives of such works, not created by them. [3]

The Dominant Culture's Main Forms of IPR and its Impact on the Available Intellectual Property Rights of Indigenous Peoples

There are a number of different legally recognized forms of intellectual property. These forms are recognized in the laws of most countries around the world, and there are international multilateral treaties that address them. The primary categories of these include trade secrets, trademarks, patents, and copyrights. Each of these categories is premised upon some commercial use or utility. They are also of limited duration, with the exceptions of trade secrets and trademarks. These may remain in effect premised upon continuing commercial use (in the case of trademarks), and continued commercial value and secrecy (in the case of trade secrets). The legal need for a commercial nexus in both cases to maintain such rights means that, as a practical matter they also have severe limitations on their duration as legal rights (McCarthy, 1996).

As a commercial underpinning is a requirement of legal protection in the intellectual property rights system, this poses a fundamental barrier to the extension of intellectual property rights to the traditional knowledge of Indigenous peoples. Indeed, the very nature of much of TK is the antithesis of commercial use.[4] Community-held stories, oral history, medicinal knowledge and life-ways were expressly not to be exclusively controlled or limited in a commercial manner if protocols are followed in most indigenous societies. Rather, they comprised the expression of commonly held values, beliefs and life-ways that allowed a particular tribe, band, nation, or people to define themselves.

The second significant barrier to the usage of the current IPR system for the protection of Indigenous TK has to do with the communal nature of the "holding" of such TK. Indeed, within most Indigenous societies, TK is not individually held for purposes of commercial exploitation, but rather protected, nurtured, and passed down for the benefit, continuity, and growth of a particular culture. Truly this is "knowledge of the people"—folklore, as it was more commonly known in the past—knowledge held by a people regarding their environment, their social lives, and themselves. Information held by the "knowledge bearers" within a particular society or family is frequently passed down. Such individuals are then responsible for the dispersion and respectful usage of specific types of knowledge. This is considered to be a position of community and lineage responsibility,

[3] "… the default rule within the intellectual property system that is anything that is not specifically protected by law – copyright, patent, trademark – is within the public domain. The public domain is a catch–all of all ideas and expressions from all humanity over time. It is viewed as a commons where people go for inspiration … And it's not stealing because that's old stuff in the public domain. So, that's the mentality that we are dealing with" (Tsosie, June 25, 2017, p. 1-2).

[4] "The most problematic aspect of any meaningful discussion of intellectual property rights is that the notion of IPR is, in itself, a Western concept being applied to non-Western societies" (Moran and Roley, December 2000, p. 2-3).

rather than a position of commercial exploitation and exclusive access.[5]

The third significant barrier to the usage of such legal concepts for the protection of traditional knowledge has to do with the limited duration of legal protection necessary to secure legal rights in the form of patents and copyrights, as well as the practical limitations on duration extended to trade secrets and trademarks due to a continuing commercial nexus requirement. Much of what comprises TK is passed down over hundreds or even thousands of years, and its origin from any particular person is usually unknown (nor is this considered particularly important). Much of this Indigenous knowledge is passed down orally with good reason.[6] Such TK has been selected and refined with great specificity generation after generation, and as such has stood the enduring test of efficacy and value to a people: the test of time.[7] Indeed, Alaska's Indigenous peoples created sustainable communities in challenging environments for thousands of years implementing such TK (Kawagley, 2006).

Despite such thorough testing, the lack of individual ownership associated with TK, the duration that such TK has been in existence, and the lack of its commercial exploitation, all create barriers to any possible protection offered under IPR laws today. Accordingly, the major categories of intellectual property law available today largely fail to provide adequate coverage for Indigenous traditional knowledge. Indeed, Battiste and Henderson explain the following on page 69 of their book titled *Protecting Indigenous Knowledge and Heritage: A Global Challenge*:

> The objective of intellectual property law is twofold: to encourage innovation by providing the innovator with monopoly control of commercial applications and to encourage the diffusion of technology by limiting the duration of the innovator's monopoly. Among indigenous peoples, innovation and diffusion are regulated through the social relationships among kinship groups and voluntary associations, not through markets. Moreover, the main focus is the proper use and sharing of knowledge rather than maximizing its quantity.

Therefore, creations by Indigenous peoples that are considered to be "too old" to be protectable under existing law, or otherwise incapable of being protected, are categorized

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[5] "Specifically, the … assumption – that ownership is individually held – is used to negate tribal (collective) "ownership" over Indian lands, spiritual practices, and cultural traditions: If (a) ownership of such "goods" cannot be traced back to a single individual; then (b) no "one" must own them. This logic is insidiously and explicitly employed by whitestream proprietors to transfer commonly held indigenous "property" to the realm of public domain" (Grande, p. 111).

[6] "Within the structure of story, there is a place for the fluidity of metaphor, symbolism, and interpretive communications (both verbal and non-verbal) for a philosophy and language that is less definitive and categorical. My sense is that skilled orators, then and now, were able to imbue energy through word choice, and allow listeners to walk inside the story to find their own teachings. The interpretation and the teachings taken become the listener's task. With the listener's involvement, the insight gained from the story is a highly particular and relevant form of knowledge exchange" (Kovach, 2009, p. 60).

[7] "Through the oral tradition, story becomes both a source of content, as well as methodology. Story enables individual and community life and the life and process of the natural world to become primary vehicles for the transmission of Native culture" (Cajete, 2000, p. 94).

as being within the "public domain."[8] Duhaime's Law Dictionary state that "intellectual property is perhaps an oxymoron" with respect to works that fall within the public domain, as such works are offered no legal protection at all. Pages 1-2 explain the following:

> Public domain is an entrenched doctrine of intellectual property law and refers to intellectual property works, such as inventions, writings, recordings or photographs, which have no patent or copyright intellectual property protection. Thus, public domain materials are not protected by intellectual property law. Legal ownership belongs to the public at-large; and not to any individual person. In the result, anyone can use a public domain work without obtaining permission, but no one can ever own it.

Indeed, Berman outlines the treatment that Indigenous peoples have received at the hands of the IPR system on pages 1-2 of the article *Indigenous Arts, (Un)Titled*:

> Access to the law then becomes not only a question of application, but one of authorship—again, invoking the question, "Whose public?" At the extreme end of unequal access to the law, it could be argued that Western law itself does not extend to the variety of public constituents (e.g., indigenous peoples) evenly or equitably… For instance, appropriation of indigenous iconography into state and national symbols signifies assimilative practices whereby "Native art" stands in for "Native," and is upheld by indigenous symbols that are believed to rest in the public domain.

The Cultural Intellectual Property Rights (IPR) System and Indigenous Peoples Today:

Such a complete legal inability to utilize or access IPR systems by Indigenous peoples to protect their TK is frequently explained away as an effect, rather than cause, of participating in "modern society." This is one of the challenges facing Indigenous peoples in their attempts to reclaim and use TK as a basis for re-establishing their own traditions, identity, and sovereignty. But is this actually the case, or is this a historical tactic of colonization that continues into the present? In an Alaskan context, Kawagley addresses the effect of colonization as follows on page 1 of his book titled *A Yupiaq Worldview: A Pathway to Ecology and Spirit*:

> The Western educational system has attempted to instill a mechanistic and linear worldview in indigenous cultural contexts previously guided by a typically cyclic worldview. The "modern" view tends to be oriented toward the manipulation of the world's resources – including people – toward political, social, and economic progress … This view is reinforced by an underlying notion of "manifest destiny" … Notions such as manifest destiny reflect the historical intent of Western society in its approach to indigenous peoples wherever they were encountered, and the

[8] The scope of copyright protection is limited in duration. As a matter of U.S. law, "the duration of copyright in these works is generally computed the same way as for works created on or after January 1, 1978: life plus 70 years or 95 or 120 years, depending on the nature of authorship. However, all works in this category are guaranteed at least 25 years of statutory protection" (U.S. Copyright Office, n.d., p. 1).

> residue of such notions is still present today in the sociopolitical practices of governing institutions regulating the lives of indigenous people in such places as Alaska, Canada, New Zealand, Australia, and Norway.

Due to this paradigm, the instances where the intellectual property rights of Indigenous peoples have been denied by researchers, companies, and the dominant Western society in general, are numerous (Berman, 2003; Singer-Vine, 2010; Harman, 2010; Janke, T., 2000-2001, Gardiner, 1997). Indeed, as Gardiner explains on page 48 of the article *Hands Off Our Genes: A Case Study on the Theft of Whakapapa*, the process of colonization has played a significant role in the denial of Indigenous peoples' intellectual property rights:

> The most fundamental right to determine what Indigenous People see as being their intellectual property has been destroyed through the processes of colonization. The long history of the export and destruction of artifacts (the 'cultural' property) of Indigenous peoples grew out of this imperial belief in the right to define.

There are many ways in which the IPR system has not adequately protected the rights of Indigenous peoples to date. For Alaskan Indigenous peoples, this has resulted in a massive loss of traditional rights and controls over traditional knowledge (Barnhardt, 2014). Utilizing the system is often costly and complicated, as it was designed to maximize profit. In most cases the laws require a commercial nexus for protection to be afforded, and it does not recognize communal rights (except in limited and largely commercially driven cases, such as with "collective marks").[9] Greer provides the following summation on page 27 of the article titled *Using Intellectual Property Laws to Protect Indigenous Cultural Property*:

> At a fundamental level, there is a real mismatch between Western individualized intellectual property rights principles (to protect and incentivize the creation of products of individual genius) and indigenous principles of community creation and ownership. In general, indigenous peoples' worldviews hold communally owned property and stewardship as paramount. Intellectual property laws provide protection that tends to be limited in scope and duration. For this reason, there is a reasonable critique that intellectual property laws are "insufficient for representing indigenous interests."

As has been stated, the dominant Western intellectual property legal system is expressly designed to allow for "free and unrestricted use" of anything in the "public domain," which is anything not specifically covered by its limited legal views of what constitutes property rights. In other words, the dominant Western society only protects that which it legally recognizes, and it often only legally recognizes that which it believes it

[9] "As Global Exchange has stated, 'for indigenous peoples whose traditional values and lifestyle are rooted in communal living, shared resources, and the interdependence of all living things, patenting life is an anathema to the very societies and reflect values of private ownership and the pursuit of wealth, which are not paramount in indigenous cultures'" (Lit and Tano, 2002, p.15).

has created within its paradigm. Arguably, everything else is "fair game" for "fair use" and commercial exploitation by anyone, of any background, culture or affiliation. This "speeds commerce" as rights necessarily expire, if they are protected at all, and are therefore eligible for use by anyone else for improvement, use, reuse or even parody.

According to the United States Copyright Act 17, a "derivative work" is defined as follows:

> A work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.

In his article titled*, What are Derivative Works Under Copyright Law?*, Morrow explains the following about the legal rights surrounding derivative works:

> Only copyright owners have the exclusive right to produce derivative works based on their original, copyrighted works … if the original isn't yours and you don't get permission to use the original from its creator, then you're infringing that author's copyright (p.1).[10]

Therefore, legally speaking in an intellectual property context, the term "derivative" means that you must recognize the "original source" as that from which the derivative arose. However, because most TK falls outside the period of legal protection afforded by the copyright laws, it is "public domain." The same is true for inventions not filed as patents, words not filed as trademarks or consistently used commercially, or trade secrets that are no longer kept as such. The result is that any and all TK that would otherwise be considered "derivatives" of "prior" TK, or is otherwise protectable TK, are now free for all to use publicly and to create their own works upon which they can then assert their own copyright, and arguably other forms of IPR, without restriction from the original Indigenous creators. This has the practical effect of allowing anyone to usurp the TK of Indigenous peoples, create derivatives, and then extend ownership over them under today's IPR laws.

The involvement of Alaska Natives in resolving this has not been optimal. Kitchens explains the following on page 115 of her article titled *Insiders and Outsiders: The Case of Alaska Reclaiming its Cultural Property*:

> Now more than ever, considering Alaska Natives' position in the cultural property discourse is critical. Legislation in 1990 ushered in a modern cultural property framework, but this area of law remains largely unsettled and many issues have not yet been addressed … Although Alaska has a large and thriving native population,

[10] "One purpose of giving the owner of a copyright a monopoly of derivative works is to facilitate the scope and timing of the exploitation of the copyrighted work—to avoid, as it were, the 'congestion' that would result if once the work was published anyone could make and sell translations, abridgments, burlesques, sequels, versions in other media form that of the original… or other variants without the copyright owner's authorization. The result could be a premature saturation of the market, consumer confusion (for example, as to the source of the derivative works), and impaired demand for the original work because of the poor quality of some of the unauthorized derivative works" (Landes and Posner, 2003, p. 226).

> Alaska Natives have been relatively silent in this discourse. Alaska Natives' silence may limit their ability to control their cultural destiny into the future, and it suggests problems inherent in the current legal framework. The current cultural property regime does not treat all native groups equally; while American Indians as a group are generally viewed as "outsiders" to the cultural property discourse, some native groups are further limited in their ability to use the laws.

However, is it possible for a system whose foundation is so contrary to the one that has enabled Indigenous communities to be sustainable for thousands of years to ever truly be able to address their needs? The debate regarding this issue is outlined on pages 2-3 of Carpenter's article titled, *Intellectual Property Law and Indigenous Peoples: Adapting Copyright Law to the Needs of a Global Community*:

> Participants in the ongoing theoretical debate decidedly differ over whether intellectual property rights are the appropriate mechanism by which such cultural works or embodiments should be protected. Some authors argue for a new legal regime specifically designed for indigenous peoples to protect and benefit from the expressions, knowledge, and works of their culture. Others argue that property laws themselves should be sufficient. Still others argue that natural resource laws can serve as a vehicle for the protection of cultural properties from exploitation by third parties.

No matter what the dominant Western society and academia decide regarding this debate, it is clear that the current IPR system offers very little, if any, real protection for the original works and TK of the ancestors of Indigenous peoples. Utilizing Alaskan examples, it is fundamentally impossible to separate TK and ecological frameworks, which in a Western context translate to conflicts over what Western academia considers resources. Kassam explains the following on page 85 of his book titled *Biocultural Diversity and Indigenous Ways of Knowing Human Ecology in the Arctic*:

> As human ecology relates to a particular ecological region or ecosystem, indigenous knowledge is also context specific, related to and contained within, a group of people who live in a defined geographic region. Indigenous knowledge includes a web of relationships between humans, animals, plants, natural forces, spirits and landforms.

United Nations Declaration on Rights of Indigenous Peoples

"The United Nations General Assembly has adopted a non-binding declaration on the rights of indigenous peoples after 22 years of debate. The document proposes protections for the human rights of native peoples, and for their land and resources. It passed despite opposition from Australia, Canada, New Zealand and the United States. They said it was incompatible with their own laws."

(*Indigenous Rights Outlined by UN*, BBC, 9/13/07)

This paragraph was taken from an article that was written in 2007 describing the adoption of the United Nations Declaration on the Rights of Indigenous Peoples. As was noted, four nations, each of which has large Indigenous populations, and each of which have their origins in British settler-colonialism, refused to sign.

Later in the above-referenced article, Mal Brough, the Indigenous Affairs Minister of Australia at the time, is quoted as saying the following in defense of Australia's decision not to sign, "There should only be one law for all Australians and we should not enshrine in law practices that are not acceptable in the modern world." Perhaps it would be useful for each of these national governments to review their own laws and treaties to see if they meet this standard. Would the responses and actions of these four countries, with respect to the laws and treaties made between their official governments and their Indigenous populations, be considered "acceptable" in today's "modern world" by the nations that did not sign the Declaration?

As is stated on page 2 of the article by Lutz titled *Cultural Survival*:

> No other group of human beings—women, children, refugees, workers, disabled peoples, victims of disappearance, or any other category—has waited so long [to be granted such rights.] Indigenous peoples will tell you that they are used to being patient. "After all," say those in the Americas, "we've been waiting 500 years. We can wait a little longer."

Although the patience exhibited by "those in the Americas" in the above quote shows the wisdom inherent in many Indigenous societies, such UN declarations are frequently disappointing because the statements within such documents are so rarely truly adopted into law and practice. This is because to do so would support tribal sovereignty and shift power back to Indigenous peoples. In Alaska, this has been a historical and conflicting challenge. Hirshberg and Hill make the following statement about political opposition to tribal sovereignty in Alaska on page 109 of their article titled *Indigenous Self-Determination in Education in Alaska: How Can Communities Get There*?

> There is broad political opposition to tribal sovereignty in Alaska … issues involving sovereignty – in particular subsistence rights but also land access, tribal courts, and resource development – are all areas of significant political contention between the state government and tribal governments in Alaska.

However, in the case of Australia, New Zealand, Canada, and the United States, pressure to respond in a way that is seen to be "good," "acceptable," and "humane" in the eyes of the world has been effective to a greater or lesser extent in each of the countries at issue. The mere fact that many other countries of the world drafted, supported, and signed such a declaration shows that humanity as a whole may be changing in the manner in which it recognizes the basic human rights of Indigenous peoples. The public opposition by these countries at the time forced a public debate and analysis of their laws and policies regarding the treatment of their Indigenous peoples, which is ongoing.

What does this mean for the Indigenous peoples of each of these countries who wish to retain the right to protect the land and spirituality of their ancestors, and the traditional art forms and healthcare that they wish to bring forward to the world? Due to societal structures and protocols, the need for intellectual and cultural property protection laws were not necessary in many Indigenous cultures (L. Afraid of Bear, personal communication, February 16, 2015).

Is IPR protection a "human right" or the lack of it a "human rights violation" for Indigenous peoples? While the issue has not yet been mooted before international courts, a lack of access to such legal IPR protections clearly has a material impact on the ability of Indigenous peoples to maintain some control regarding the use and protection of their TK and traditional life-ways. If these are the very things that make a people a people, and keep a unique Indigenous society from being absorbed into a larger culture and population, perhaps the question can be reframed: "Is cultural extinction a human rights violation?" Put in a more positive frame, "Is the legal protection of the cultures of Indigenous peoples necessary to protect their human rights?"

Alaskan Ambassador Ronald Barnes, Chair of the Indigenous Peoples and Nations Coalition, acknowledges this struggle for human rights in the following on page xii of the book titled *Indigenous Nations/ Rights in the Balance: An Analysis of The Declaration on the Rights of Indigenous Peoples*:

> It is not easy to stick to the fundamentals in the face of diplomatic and political powers that try to reduce one's dignity and honor to a lesser standard … Our resistance validates those who sacrificed before us; we continue to refuse to acquiesce to a lesser standard of protection of our human rights that is tantamount to no protection at all.

If the answer to either question under the *United Nations Declaration on the Rights of Indigenous Peoples,* or any other United Nations human rights-related treaty or declaration, is "yes," then it argues for a reformation of the existing IPR system, or at least the introduction of a parallel one that can extend specific rights and protections to the TK and cultural life-ways of Indigenous peoples.

So far, of the four countries at issue above, New Zealand is the country that has been most serious about actually granting its Indigenous peoples rights to protect their lands, the spirituality attached to such lands, and their culture. New Zealand has recognized the equality of Maori claims through the Treaty of Waitangi and the Waitangi Tribunal, and within New Zealand's constitution. This has resulted in a rebirth of Maori language, culture and rights in the country. This Maori example carries potential guidance for Alaska Natives who share similar critical links between what Western academia considers to be "resources" and that which indigenous Alaskans know to be integral aspects of their existence as peoples, as nations.

Collective Rights vs. IPR Systems and the Exploitation of TK by Non-Indigenous Peoples

Today's IPR systems are not largely designed to engage in collective intellectual property protection or management, but rather to provide a series of limited commercial property rights extended geographically over certain forms of ideas for a relatively short period of time. As collective and continuous representation is the foundation of most (if not all) Indigenous cultures and communities, this issue has caused, and continues to rightfully cause, great concern within Indigenous communities.

There are many examples throughout history and in today's world of government appropriation of Indigenous symbols (Berman, 2004). Likewise, there are examples of governments, companies, academic institutions, and individuals seeking "permission" from one individual to allow for the use of sacred symbols or traditional ecological knowledge that is collectively "owned" (Berman, 2004). The latter causes great upset and pain within the Indigenous communities affected as they scramble to try to figure out who "stole" their knowledge and how to seek protection against something that often is actually legally protected by the third party (as the government or company received their required "signature" from a member of the tribe or community).

An example of this can be seen in the use of medicinal plants. Here, a statement made by Loretta Afraid of Bear, an Oglala Lakota elder and traditional knowledge bearer, illustrates the point by describing the use of one plant in a purely a spiritual medicinal context:[11]

> Today, many people use [plants such as] cedar and sweetgrass, but they do not understand what using these actually does. When you burn sweetgrass, you are calling in all of the spirits—good and not so good ones. You are calling them all. So, after you burn the sweetgrass, you must use the cedar in order to purify. Once that is done, those who are not so good do not remain."

The commercialization of cedar by the dominant Western culture and its "ownership" of its use through intellectual property laws helped to remove cedar from its role as "a sacred plant of Indigenous peoples" or a plant to be treated in a sacred manner, to that of a simple commodity. Indeed, there are numerous patents issued within the United States to those whom appear to be non-Native peoples and companies securing the exclusive right to use and profit from cedar in specific capacities (each of which was arguably already identified by Native peoples many centuries before). Some examples of these include "flavored medicinal inhalants" (Application number: US 11/460,990), "cedar chests" (Publication number: US1890999A), "medicinal compositions and method for treatment of urinary tract infections" (Application number: US 13/570,789) and "cedarwood oil," which is broken down into products labeled "Virginia cedarwood oil," "Texas cedarwood oil," and Western red cedar."[12]

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[11] Afraid of Bear, personal communication, February 16, 2015.

[12] "Virginia cedarwood oil is widely used as a fragrance in soaps, air fresheners, household detergents, and cosmetics… It is also the active ingredient in cedar balls/wood blocks used as moth repellants and in bug

Although the registration of such patents ensures that the "owners" of such intellectual property have the national and/or international legal right to control the use of cedar in the specific form that they have registered with the patent office (through filing in other countries and through treaties), we did not find an actual case in which an Indigenous community was punished for continuing to use cedar either medicinally or spiritually. Likewise, we did not find a case where an Indigenous people or nation fought such registration within the intellectual property legal system.

One answer for this may lie in a form of "exhaustion" over the colonial practice of collecting and relabeling long established native flora and fauna and their properties as belonging to the "West" (Smith, 2012). Much of the lack of legal protection afforded our native plants has to do with the fact that most Native peoples today continue to utilize cedar and other medicinal herbs and plants in their natural form for ceremonial, healing, or teaching purposes (Garza, 2011), and they simply pick or cut what they need from a nearby tree within their neighborhood, community, or favorite geographic place.

Likewise, as the intellectual property system is a relatively recent—and very expensive—Western cultural invention, it would be unrealistic to expect Indigenous populations to feel systematically comfortable enough to utilize it as a tool to "protect" their communal rights or to monitor patents being filed and registered. As a Mohawk herbalist stated, "Cedar has been important to us since we were created. Why would we go to someone to ask permission to use what was always ours? It belongs to all peoples who are willing to treat it with respect" (L. Delormier, personal communication, February 14, 2015).

Over the past few decades, Native American spiritual, religious, and healthcare practices have become a trendy and popular alternative to mainstream spirituality and healthcare. Countless websites, shops, and magazines sell cedar products, and they often advertise the fact that the medicinal and spiritual properties of cedar were first discovered by Native peoples. However, we could find very few of these products that were labelled as being owned, or vendors operated by, Indigenous people or nations. A patent search conducted over the internet did not show that any Indigenous tribes have secured the intellectual property rights for "cedar" or its derivatives.

Such statistics are aligned with the following statement on page 1 of the article titled *Patents and Biopiracy*:

> An estimated 90 percent of the world's biodiversity lies within the territories of indigenous peoples, whether the Amazon, the Indian subcontinent or the North Woods. A new form of colonialism, known as biocolonialism, is reaching deep into the heart of these communities… Ninety-seven percent of all patents are held by industrialized countries.

After discussing the above issue (with regard to cedar, as well as other plants and herbs that have long been utilized by Indigenous cultures and later appropriated by outside

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blocks. Because of concerns about the toxicity of naphthalene ("moth balls") and high concentrations of Deet…the market for cedarwood oil products is expected to grow" (prepared by NCI, 2002, p.1).

cultures) and IPRs with Indigenous elders from the tribe of one of the authors of this article, a few things became clear. First, it was obvious that there was overall distrust that the current IPR system would indeed protect their people's right to utilize cedar as their ancestors taught them to do. In addition, it became clear that the part that disturbed them most about the appropriation of their TK was not simply that others were "taking credit," generating resources in the form of money that was not being used to benefit the Indigenous people who first identified the medicinal benefit, and claiming ownership of their TK, but that the actual plant/tree was being misused and, therefore, abused.

As one such Elder eloquently said, "If they knew how to use it the right way, it could help them. This all belongs to Creator anyway" (L. Afraid of Bear, personal communication, February 16, 2015). While this statement may not be reflective of the traditional knowledge keepers of all Indigenous peoples, it does illustrate both a tremendous degree of patience with non-Indigenous pharmacologists, and the underlying belief that Creator provided such "medicine" for all humanity. This perspective is vastly different than one that designates such plants as "resources" that can be "discovered" and exploited by those people who can claim ownership and then restrict use to those that can subsequently "afford it" under an IPR model.

The statement serves to outline the massive disparity in worldview between the application and use of TK and most IPR. It also serves as a testament to the resiliency of Native knowledge systems in the face of both colonialism and a legal, political and cultural system at odds with indigenous TK. Indeed, in the case of Alaska Native knowledge, there appears to be a growing recognition of its contributions to key academic fields (Barnhardt and Kawagley, 2010).

The Exploitation of the Genetic Resources of Indigenous Peoples by the Dominant Culture

The prior section provides a case study that demonstrates the way in which traditional knowledge regarding the medicinal properties of plants might be shared. The traditional rights to the same become confused (although not destroyed) due to the extension of IPR over them by what appear to be non-indigenous people and companies. Many more sinister and clearly abusive examples abound. In the following example, the nexus between IPR, TK, and human rights are clearly illustrated.

As Western technology continues to evolve and become seemingly more "advanced," genetic resources and the issues regarding legal protections surrounding such resources are at the forefront of many communities. This is especially true within many Indigenous communities, as such peoples have been routinely exploited historically by Western academia in the name of "research" and "science." This can take many forms, and continues up to the present day.

According to the World Intellectual Property Organization (WIPO) website (www.wipo.int/tk/en/genetic/), the definition of "genetic resources" is as follows:

Genetic resources (GRs) refer to genetic material of actual or potential value.

> Genetic material is any material of plant, animal, microbial or other origin containing functional units of heredity. Examples include material of plant, animal, or microbial origin, such as medicinal plants, agricultural crops and animal breeds.

In addition to this, page 12 of the *WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, First Session (Geneva, April 30 to May 3, 2001)* states:

> Genetic resources have a double nature: they are physical material and the carriers of hereditary information, which is capable of self-replication. This double nature gives rise to a conceptual tension between physical property in germplasm on the one hand and intellectual property rights in intangible elements of genetic resources, which constitute inventions, trade secrets or new plant varieties on the other.

Indeed, as Gardiner explains on page 48 of the article *Hands Off Our Genes: A Case Study on the Theft of Whakapapa*, Indigenous peoples have not had a positive or fulfilling historical experience with their intellectual property rights being respected due to colonization:

> The most fundamental right to determine what Indigenous People see as being their intellectual property has been destroyed through the processes of colonization. The long history of the export and destruction of artifacts (the 'cultural' property) of Indigenous peoples grew out of this imperial belief in the right to define.

In many instances, the abuse of the cultural and intellectual property rights of many Indigenous peoples has extended past the realm of ideas, traditional knowledge, artifacts, symbols, and patterns, and into the realm of "genetic resources." For most Indigenous peoples, "all parts of the body were [considered] sacred, in death and in life," and human remains and even excreta were carefully guarded, preserved, and buried, as they were believed to hold the spiritual essence of the person (Palmer, 2001, p. 5). However, the dominant culture, Western science and academia, and the Western-based legal system (common and civil law) have taken a very different stance. As this approach is completely counter to the one taken by most Indigenous cultures, the likelihood for potential abuses is high, and the need for additional protections is paramount.

An example that points to the need for intellectual property protections with regard to the genetic resources of Indigenous peoples began in the late 1980s and affected the Havasupai Tribe of Arizona. The Havasupai Nation is a tribe of roughly 650 people who are the "descendants of the Hohokam Indians, who migrated north from what is now Mexico around 300 B.C. … [and] who settled in an isolated and remote location in the Grand Canyon" (The Havasupai Case, 2007, p. 1). Page 2 of the article by Harmon (2010) titled, *Indian Tribe Wins Flight to Limit Research of Its DNA* describes what occurred as follows:

> Members of the tiny, isolated tribe had given DNA samples to university researchers starting in 1990, in the hope that they might provide genetic clues to the tribe's devastating rate of diabetes. But they learned that their blood samples had been used to study many other things, including mental illness and theories of the tribe's

geographical origins that contradict their traditional stories.

This case brings to the forefront many of the issues surrounding intellectual property rights and genetic resources, including whether or not researchers truly obtained consent for the research they were doing, whether or not the study participants actually understood the consent forms that they signed (if any were signed at all), and whether or not the research findings truly were used to benefit the participants/community involved in the study. Carletta Tilousi, a member of the Havasupai tribe, explains her perspective as follows: "I'm not against scientific research … I just want it done right. They used our blood for all these studies, people got degrees and grants, and they never asked our permission" (Harmon, 2010, p. 2).

Indeed, public reports state that the Havasupai people never received any follow-up information regarding diabetes—or anything else that their genetic material was used for—which is common for Indigenous communities who participate in Western-based academic research studies. Floranda Uqualla was one of the Havasupai tribal members who aided researchers in recruiting other tribal members to give blood. As both her parents and grandparents suffered from diabetes, receiving help to understand and prevent the disease from affecting her people seemed to be a beneficial thing. She describes her feelings about what occurred, and what she perceives to be her role in it, as follows: "I went and told people, if they have their blood taken, it would help them… And we might get a cure so that our people won't have to leave our canyon… I let my people down" (Harmon, 2010, p. 3-5).[13]

The Havasupai tribe did finally receive a monetary settlement from Arizona State University. At the time of publication of Harmon's article in 2010, "The Havasupai settlement appears to be the first payment to individuals who said their DNA was misused…and came after the university spent $1.7 million fighting lawsuits by tribe members" (Harmon, 2010, p. 3). However, the negotiation and acceptance of a settlement also means that a precedent was not set through this case, legally, and a similar legal confrontation may have to be dealt with in the future to more fully resolve such breach of trust cases.

Perhaps most importantly to the Havasupai People, their genetic materials, in this case in the form of vials of blood, have been returned to them. This did not, however, right the original wrong. In our opinion, Dr. Markow's very simple and straightforward response might say it all. After knowing all of the facts, being aware of the Havasupai people's feelings about what occurred, and seeing that at least one of the universities involved paid a large settlement to the community she made promises to and "researched," she still has claimed publicly to have been doing "good science." If this is the case, then it has much to say about the true state of Western science, which oftentimes seems to be an industry or ideology in which the outcome is valued more than the process.

[13] "Women remember being happy to see [Dr. Markow] in those days, an athletic figure who talked to them about how to be more healthy. Working out of the health clinic in the center of the village, Dr. Markow recruited tribe members to ask others to give blood. To the Havasupai, blood has deep spiritual meaning" (Harmon, 2010, p. 3).

This bias is well-rooted in the legal context as presented by Henderson on page 248 of his article titled *Ayukpachi: Empowering Aboriginal Thought*:

> Aboriginal people are daily asked to acquiesce to Eurocentric theories of legal context that are based firmly on fictitious state-of-nature theories and cultural differences. In one way or another, they are being asked to validate the colonialists' libel. They are being asked to affirm alien values and to sacrifice Aboriginal values for them.

Indigenous peoples were not consulted as to whether or not they wished to partake of the dominant culture's perspective regarding their cultural and spiritual knowledge or their genetic material. However, here they sit, very much in the center of a debate in which they never intended to participate. They continue to be deeply immersed in ethical dilemmas of which their carefully designed social systems steered clear.

Protection of the TK of Indigenous Peoples: A Path Forward

The way forward fundamentally poses three alternatives: attempt to utilize existing IPR systems to systematically protect Indigenous peoples' TK, amend such IPR systems to protect the TK of Indigenous Peoples, or seek to create a new Indigenous IPR system. Each of these paths has merit.

While the problems identified in this article regarding the usage of existing IPR systems are manifest, there remain ways they can be used. "Trade secret law" can be used to protect traditional medicinal or other arguably commercially valuable knowledge that is kept a secret within a certain group. "Copyright" may be filed for a version of traditional stories, songs and designs by a traditional knowledge keeper in their own words or creation that can then be subsequently assigned into communal ownership. Indigenous people can seek to protect and defend their key words of identification as "trademarks," "service marks," or "domain names." Lists of the uses of traditional plants, minerals, animals, and traditional manufacturing methods may be kept as a means to identify "prior art," which can be used to defeat patents being claimed on the same by non-Indigenous peoples.

There are laws in place in different countries and states within the United States that have specifically been amended to address certain problems IPR has caused for Indigenous peoples ("Cultural and Intellectual," n.d.). There are laws in the United States regarding the necessity to conduct research in Indigenous communities in a respectful and permission-based manner, which can be used to control ownership and access to knowledge released outside the specific Indigenous people or tribe. Trademark law in the United States, and a number of other countries, will no longer register terms seen to be "words of disrepute" extending to Indigenous peoples. There has even been the cancellation of registrations for existing marks seen to mock Indigenous peoples as a reflection of such arguably growing sensitivity.

Finally, there is the opportunity to create and embrace a truly Indigenous-based IPR system for the protection of TK and Indigenous life-ways. While this has not yet been

implemented in the form of a globally accepted, United Nations-sponsored, multi-national treaty, certain countries have moved forward with their own versions, or are in the process of doing so. In the case of Africa, nine of the African Regional Intellectual Property Organization (ARIPO) member countries have agreed to create and launch their own Indigenous IPR system through mutual treaty, to be managed by ARIPO. These bold steps will likely serve to incentivize other countries to begin to implement ways they can identify, protect, and allow for the defense of Indigenous IPR. As more countries come to recognize the benefits of respecting and protecting the TK and traditional life-ways of their Indigenous peoples, we can expect to see increasing attempts at legislation and international diplomacy to encourage others to follow suit. According to our recent interview with the United States Patent and Trademark Office, India and Ecuador are two countries involved in such legislation and diplomacy at present. More are likely to follow.

Conclusion

Laws are ultimately a reflection of the values of the society in which such laws are made, used, and enforced. The dominant culture within such societies, therefore, largely determines such laws. The field of intellectual property rights law is no exception. As Indigenous peoples throughout the history of the last 500 years have largely been systematically excluded from shaping the legal systems of the colonizing cultures, it is not surprising that the IPR systems in place have not historically been designed or applied to address the protection of Indigenous TK, or common property in general.

Colonization, however, is a historical event and its impact is a historical construct. While the clock cannot be turned back for our Indigenous societies to a time before colonization, we can work together to ameliorate, or at least reform, its worst impacts. We can decide what to keep or reject within this historical construct. As Indigenous peoples and non-Indigenous peoples, we can seek a new path forward for the world as it is today, and the world as we want it to be.

The traditional knowledge of our Indigenous peoples is not *anthropology* or *ethnography*, but rather a part of vibrant and living cultures that have much to share and teach the world. TK has much to contribute to future generations of Indigenous peoples with unique cultures. Understanding that value, and advocating new ways to identify, protect, and enforce rights over such traditional knowledge offers an important path to the future, as well as offering us the opportunity to respectfully acknowledge the depth, diversity, and richness of our intellectual past.

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